Title: DIELECTRIC STRUCTURES

REMARKS

This responds to the Final Office Action dated December 17, 2009. Claims 1, 8, 12, 13, 52, 62, 63, and 67 are amended, claims 10, 60-61 are canceled, and no claims are added; as a result, claims 1-9, 11-13, 52, 53 and 62-70 are now pending in this application.

§ 103 Rejection of the Claims

Claims 1-13, 52, 53 and 60-70 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,403,441 B1 to Takehiro et al. (hereinafter, "Takehiro") in view of U.S. Patent No. 5,392,189 to Fazan (hereinafter, "Fazan"). Applicant respectfully submits that the claims are distinguishable over the cited references for at least the following reasons.

The rejection states that Takehiro discloses a plurality of high-K dielectric layers (9, 10, 11). Takehiro appears to show an initial BST layer 9, and a heat treatment to create a transitional layer 10 (column 7, lines 53-57). Takehiro also appears to show a second BST film 11. However Applicant is unable to find in Takehiro a first high K dielectric layer, and a second high K dielectric layer including deposited components different from those in the first high K dielectric layer. Applicant is also unable to find in Takehiro a tantalum pentoxide dielectric layer. Applicant respectfully submits that Fazan does not cure these deficiencies of Takehiro.

In contrast, claim 1 as amended recites a first high K dielectric layer, and a second high K dielectric layer including deposited components different from those in the first high K dielectric layer. Further in contrast, claim 8 as amended recites a first high-K capacitor dielectric comprising tantalum pentoxide, and a second high-K capacitor dielectric comprising tantalum pentoxide. Further in contrast, claim 12 as amended recites a second high-K capacitor dielectric comprising a high-K dielectric having at least one different component that the first high-K capacitor dielectric. Further in contrast, claim 13 as amended recites wherein at least one of the sub-layers includes a deposited dielectric component different from one or more of the other sub-layers. Further in contrast, claim 52 as amended recites wherein each layer of said plurality is a tantalum pentoxide high-K dielectric. Further in contrast, claims 62 and 63 as amended recite wherein at least one layer in the plurality includes a component not present in other layers of the plurality. Further in contrast, claim 67 as amended recites wherein each layer of the plurality

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comprises tantalum pentoxide included within an adjacent layer of the plurality. Support for the claim amendments can be found in the specification in general, and at least in paragraph 34 of the substitute specification filed July of 2003.

Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC §103(a) rejection is not supported by the references. Reconsideration and withdrawal of the rejection are respectfully requested with respect to Applicant's independent claims 1, 8, 12, 13, 52, 62, 63, and 67. Additionally, reconsideration and withdrawal of the rejection are respectfully requested with respect to the remaining claims that depend therefrom at least as depending on allowable base claims.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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Date June 16, 2010

By David C. Peterson
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 16th day of June, 2010.

Amy moriarty

Signature

